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REPORT ON THE ECA/ENPC REGIONAL SEMINAR ON TRANSPORT STATISTICS

Addis Ababa, 11 to 22 June 1984

LC/NAIROB

A. Introduction

1. The Regional Seminar on Transport Statistics was organized and conducted by ECA in collaboration with Ecole nationale des ponts et chaussie (ENPC) of Paris, France and was held in Addis Ababa, Ethiopia from 11 to 22 June 1984. The objective of the seminar was to assist African Governments and other institutions, dealing with transport, to ensure that statistics is utilized as a planning and a management tool in the development of transport in Africa. It was, therefore, planned to suit those responsible for the collection, compilation, analysis, and dissemination of transport data, and statistical information.

B. Terms of reference

2. The seminar was the first of its kind organized by ECA within the context of the United Nations Transport and Communications Decade in Africa (1973-1988) (UNTACDA) aimed at enabling transport statisticians, planners, economists and various users of transport statistics to discuss informally problems of transport statistics among themselves and together with ECA and ENPC transport/statistics specialists.

C. Attendance

3. The seminar was attended by 22 participants representing 19 African States and, among them, one participant representing the Union of African Railways.

4. Invitations for participation in the seminar were sent to all African Governments and selected inter-governmental organizations dealing with the development and improvement of transport. Applications were received from 55 participants from 25 African countries.

D. Seminar organization

5. The seminar was run in a participative manner, chaired by the various lecturers and/or seminar co-ordination. Documents for the seminar were all distributed in advance to participants on arrival in Addis Ababa. On completion of the seminar, the evaluation was carried out by ECA and ENPC staff together with the participants. Results of seminar evaluation and other comments by participants appear as Annex I of this report.

6. ECA comments on seminar participation and on evaluation by participants appear as Annex II of this report.

E. Agenda

7. The agenda and content of the seminar showing the distribution and titles of lectures appear as Annex III of this report.

F. Language and documentation

8. The working languages of the seminar were English and French. The documents for the seminar were prepared by the respective lecturers in both languages. A complete list of documents and books distributed to participants appear as Annex IV of this report.

G. Opening of the seminar

9. The seminar was opened by Mr. Tchouta Moussa, Director, Transport, Communications and Tourism Division of ECA who also delivered the opening statement. The full text of his statement appears as Annex V of this report.

10. Mr. B. Mandangaran representing ENPC delivered a short speech on behalf of ENPC staff and lecturers. He took the opportunity also to thank Mr. Tchouta Moussa for opening the seminar and to thank ECA for the collaboration extended to ENPC in the preparation and running of the seminar. He made use of the opportunity also to introduce to ECA and seminar participants the four lectures from ENPC. Mr. Mandangaran further conducted the first session of the seminar highlighting the framework of statistics in the development of the transport sector in France.

H. Closing of the seminar

11. The seminar was closed by Mrs. T.W. Kacperska, Chief, Transport Section, who also presented certificates of seminar completion to the participants. After the final evaluation during the closing session, a representative of the participants delivered a speech thanking ECA and ENPC for organizing the seminar.

12. Two participants, one from Burundi and another from Nigeria, did not complete the seminar, and were, therefore not awarded certificates of seminar completion.

Annex I - LIST OF PARTICIPANTS

BENIN

Mr. Paul Laurent Djossa, Responsable du Service Statistique des Transports, Ministère des Transports, B.P. 03-1040, Cotonou, République Populaire du BENIN

BOTSWANA

Mr. G.B. Kgasa, Senior Statistical Officer, Transport Statistics Unit

Mr. James Musey, Senior Planning Officer, Ministry of Works and Communications Planning Unit, Private Bag 007, GABORONE, BOTSWANA

BURUNDI

Mr. Charles Bizimana, Directeur des Voies Navigables, (Ministère des Transports Postes et Telécommunication), B.P. 2400, BUJUMBURA, BURUNDI

CONGO

Mr. Landou Samuel, Attaché chargé de la Planification, Ministère des Transports et de l'Aviation Civile, B.P. 2140, BRAZZAVILLE, REPUBLIQUE POPULAIRE DU CONGO

EGYPT

Mr. Makram Abadir Farag, Manager of Service Statistic Department, Central Agency for Public Mobilization and Statistics, Nasr City, Cairo

Mr. Onsy Fahim, Senior Economist, Ministry of Transport, Transport Planning Authority, 105, Kasser El Ei Street, Cairo

ETHIOPIA

Mr. Gashachew Telahun, Head Statistics Division, Ministry of Transport and Communications, P.O.Box 1238, Addis Ababa, Ethipia

GABON

Mr. Nziengui-Nziengui, Directeur de la Flotte de Commerce au Ministère de la Marine Marchande, B.P. 803, Libreville, GABON

GAMBIA

Mr. S.M. Mboge, Senior Statistician, Central Statistics Department, Buckle Street, Banjul, THE GAMBIA, WEST AFRICA

GUINEE

Mr. Naby Moussa Sangare, Chef de Service Planification et Statistique au Ministère des Transports, Conakry (Republique de Guinee) Tel: 44-72-12 our 44-27-73

MADAGASCAR

Mr. Séraphin Ravelona, Chef du Service Collecte des Données et Statistiques, Direction des Etudes, de la Planification et de Coordination des Transports, Ministère des Transports, du Ravitaillement et du Tourisme, B.P. 581, Antananarivo, MADAGASCAR

MALAWI

Mr. Gabriel L. Chimwala, Chief Assistant Statistician, National Statistical Office, P.O.Box 333, Zomba, MALAWI

NIGER

Mr. Amadou Hainikoye, Chef du Service Departmental des TP de Niamey, B.P. 235

NIGERIA

Mr. Micah Olaseni Ajijo, Chief Planning Officer, Federal Ministry of National Planning, P.M.B. 12558, Lagos, NIGERIA

SWAZILAND

Ms. Judith F. Dlamini, Assistant Statistician, C.S.O., P.O.Box 456, Mbabane, SWAZILAND

REPUBLIC OF CAMEROON

Mr. Kuété Moise, Chef Service des Trafics et des Statistiques, Ministère de Transports, Yaounde

UNITED REPUBLIC OF TANZANIA

Mr. David Alphonce Yohana Mkwana, Statistician, Ministry of Communications and Works, P.O.Box 104, Dar-es-Salaam, TANZANIA

UPPER VOLTA

Mme Marie-Thérèse Guiebo, Chef de Service des Transports Terrestres, Direction des Transports, B.P. 7001, OUAGADOUGOU

ZAIRE

Citoyen Mongbongo Mangbandu, Chef de Bureau Chargé des Transports Maritime, Fluvial et Lacustre, Département du Plan/Direction des Infrastructures, B.P. 9378, Kinshasa I, ZAIRE

Mr. Girma Woldeyes, Head of Economic, Transport Section, Union of African Railways, P.O.Box 687, Kinshasa I, ZAIRE

ZAMBIA

Mr. Lamsden G. Zulu, Statistician, Central Statistical Office, P.O.Box 31908, Lusaka, ZAMBIA

Seminar evaluation results

1. Selection of topics

(a) Which topics should be deleted in future seminars; which should be added or developed in more detail?

None should be deleted, but EDP should be explored more in depth including data bank. General problems in Africa regarding transport statistics should be included in future seminars.

(b) Other observations

Materials were too brief and subjects related to transport planning should also be included in future seminars.

2. Which topics are the most interesting and useful; which ones are less (or not) interesting?

Most interesting topics: Road transport data collection, statistics as management tool, road accidents statistics, manual data processing, forecasting, and classification of road data. No topic appeared as uninteresting.

3. Duration of the course

How long should the next course be?

Three weeks (9)
Two weeks (7)
One week (4)
One to two months (2)

4. Time allotted for each lecture

What duration of each lecture do you consider adequate?

1 hr. 30 min (16)
1 hr. 00 min (4)
1 hr. 45 min (2)

5. Time allotted for questions or discussions

How should the time of lectures and discussions be apportioned?

1 hr. lecture, 30 min discussion (16)
1 hr. lecture, 1 hr discussion (6)

6. Methods of presentation

(a) What additional methods of presentation would you find applicable (case studies, exercise, group discussions, etc.)?

The majority felt that the methodology of presentation is adequate, but a few others suggested that future seminars should have case studies and exercises included.

(b) Do you have any other comments?

The majority of participants felt that documentation given are inadequate. Others feel that more in-depth analysis of the subject was necessary.

7. Lecturers' knowledge of subject matter

Which lectures were most interesting?

Lecturers on railways, uniform maritime statistics, role of statistics in transport, forecasting and role of statistics in management.

8. Documents

What comments do you have on the material presented?

A good number of participants said that the documents were alright but some felt they were shallow.

9. Course relation with your professional activities

(a) Is the knowledge derived from the seminar applicable in your professional work?

All participants agreed that the course content was relevant to their professional work.

(b) Do you intend to pass the knowledge acquired to others; if yes, to whom?

All participants agreed that they will pass all knowledge to both their superiours and subordinates.

(c) Was the balance between the theory and practice acceptable?

The balance was right but conditions in Africa should be reflected more by all lecturers.

(d) Do you recommend a similar seminar for your supervisors and/or those you supervise?

All participants agreed that they recommend similar courses to all managerial staff dealing with transport statistics.

10. Do you feel that in future the seminar should be conducted on modal basis, that is a seminar on road statistics, a seminar on port statistics, etc.?

Participants were equally divided on this issue, some for modal, others for sectoral course.

11. In general what improvements would you suggest for future seminars

Participants felt the seminar is good enough but recommend field visits, translation of all documents, and many recommended that the documents should be prepared more in details.

12. Any other comments and suggestions

Some participants recommended that international aspects of the subjects should be given full treatment, although the majority had no additional comments on the seminar.

ECA comments on the seminar in general and participants evaluation

Level of participation

The participants who attended the seminar were mostly graduates of transportation, economics and/or statistics. Their working experiences ranged from 2 to 24 years in various fields related to either general transport, economics, transport planning or mathematics. The level of participation was, therefore, good and generated interactive discussions as was expected in a seminar of the level ECA & ENPC organized. Attendance was quite good and evidence of preparation by participants for the sessions on the basis of advance reading of documents was reflected in the majority of sessions conducted.

Duration of the seminar

Future seminars on the same topic should last 2 weeks if arranged on sectoral basis, but could be reduced to only one week if a modal approach is to be adopted. It is encouraging that participants were satisfied with the duration of the seminar, the selection, and coverage of topics.

Methodology of presentation

Future seminars should be equally balanced between discussions and lectures. Although participants agreed that the balance between theory and practice was good, more efforts will be made in future to introduce a few case studies, group discussions, and some simple exercices. Although some participants felt that mathematical techniques should be handled more in depth, this would not be in line with the objectives of the seminar which is focussed more on performance improvement rather than teaching of statistical/mathematical techniques.

Selection of participants for future seminars should ensure that those admitted are familiar with all mathematical techniques which are generally used in applied sciences. Attempts will also be made to ask participants to bring along any practical case studies that may be used in class.

Documents distributed for the seminar

It was agreed during seminar preparatory stages between ECA and ENPC that only lecture outlines should be prepared of a limited number of pages. This approach should be abandoned in future seminars since some documents were too brief for future references by participants. In future, documents should be made to reflect all details in the topics to be discussed.

Annex IV - WORK PROGRAMME

Day and time	Session/Activity	Speaker (Organization)
Monday, 11 June 1984		
9.00 - 10.30	Registration	
10.30 - 11.00	Break	
11.00 - 12.30	Opening	
12.30 - 3.00	Lunch break	
3.00 - 5.00	The role of statistics in the development of the transport system	Mr. A. Cummings-Palmer (ECA)
Tuesday, 12 June 1984		
9.00 - 10.30	Statistics as a tool for Management and decision Making	Mr. A. Amelewonou (ECA)
10.30 - 11.00	Break	
11.00 - 12.30	Classification of transport data and statistics	Mr. Decure (EUPC)
12.30 - 3.00	Lunch break	
3.00 - 5.00	General Problems of transport data collection and proposals for solutions	Mr. Decure (EUPC)
Wednesday, 13 June 1984		
9.00 - 10.30	Collection and documentation of road transport data	Mr. Ledru (EUPC)
10.30 - 11.00	Break	
11.00 - 12.30	Collection and documentation of rail transport data	Mr. Solis (ECA)
12.30 - 3.00	Lunch break	
3.00 - 5.00	Standardization of ports and shipping statistics (role and advantage)	Mlle Roy (EUPC)

Thursday, 14 June 1984		
9.00 - 10.30	Ports and shipping statistics indicators	Mlle Roy (ENPC)
10.30 - 11.00	Break	
11.00 - 12.30	Collection and documentation of inland water transport data	Mlle Roy (ENPC)
12.30 - 3.00	Lunch break	
3.00 - 5.00	Collection and documentation of air transport data	Mme Ellie (ENPC)
Friday, 15 June 1984		
9.00 - 10.30	The role of communications in data collection, storage and retrieval	Mme Ellie (ENPC)
10.30 - 11.00	Break	
11.00 - 12.30	Statistics of road safety	Mr. Ledru (ENPC)
12.30 - 3.00	Lunch break	
3.00 - 5.00	Methodology of analysis of transport data I (General)	Mr. Decure (ENPC)
Monday, 18 June 1984		
9.00 - 10.30	Manual data processing Method I	Mr. De Graft-Johnson (ECA)
10.30 - 11.00	Break	
11.00 - 12.30	Manual data processing Method II	Mr. De Graft-Johnson (ECA)
12.30 - 3.00	Lunch break	
3.00 - 5.00	The uniform system of maritime transport statistics	Mr. Han-Son Chu
Tuesday, 19 June 1984		
9.00 - 10.30	Mechanized data processing method	Mr. K.T. Mavuba (ECA)
10.30 - 11.00	Break	
11.00 - 12.30	Methods of data storage and retrieval	Mr. K.T. Mavuba (ECA)
12.3- - 3.00	Lunch break	
3.00 - 5.00	The uniform system of maritime transport statistics	Mr. Han-Son Chu

Wednesday, 20 June 1984		
9.00 - 10.30	Forecasting techniques	Mr. P.T.A. Here (ECA)
10.30 - 11.00	Break	
11.00 - 12.30	Methodology of analysis of transport data II (Railways)	Mr. Solis (ECA)
12.30 - 3.00	Lunch break	
3.00 - 4.00	Visit to ECA Statistics Division	Group visit
4.15 - 5.00	Visit to Pan-African Data Information Services (PADIS)	Group visit
Thursday, 21 June 1984		
9.00 - 10.30	Organization and management of national and subregional transport statistics unit	Mr. Decure (ENPC)
10.30 - 11.00	Break	
11.00 - 12.30	Evaluation of Seminar	ECA/ENPC/participants
12.30 - 3.00	Lunch break	
3.00 - 5.00	Closing session	

Annex V - List of Seminar documents

Ref. No.	Title
TRANS/STAT/84/WP.1	The role of statistics in the development of the transport system
TRANS/STAT/84/WP.2	Statistics as a tool for management and decision making
TRANS/STAT/84/WP.3	Classification of transport data and statistics
TRANS/STAT/84/WP.4	General problems of transport data collection and proposals for solutions
TRANS/STAT/84/WP.5	Collection and documentation of road transport data
TRANS/STAT/84/WP.6	Collection and documentation of rail transport data
TRANS/STAT/84/WP.7	Standardization of ports and shipping statistics (role and advantage) Ports and shipping statistics indicators
TRANS/STAT/84/WP.8	Collection and documentation of air transport data
TRANS/STAT/84/WP.10	Analysis of railway statistical data
TRANS/STAT/84/WP.11	Manual data processing Method I Manual data processing Method II
TRANS/STAT/84/WP.12	The Uniform system of maritime transport statistics
TRANS/STAT/84/WP.13	Mechanized data processing method
TRANS/STAT/84/WP.14	Methods of data storage and retrieval
TRANS/STAT/84/WP.15	Forecasting techniques
TRANS/STAT/84/WP.16	Organization and management of a national transport statistics unit
TRANS/STAT/84/WP.17	Organization and management of subregional and regional transport statistics unit

Author	Books Distributed
Emil Quinet	La Demande de Transport de la mobilisation des trafics a l'apprehension des besoins
Emil Quinet	Les Transport et la Puissance Publique

STATEMENT BY TCHOUTA MOUSSA, DIRECTOR, TRANSPORT COMMUNICATION AND TOURISM DIVISION OF THE ECONOMIC COMMISSION FOR AFRICA

AT

REGIONAL SEMINAR ON TRANSPORT STATISTICS, ADDIS ABABA, 11-22 JUNE 1984

Distinguished delegates,
Ladies and Gentlemen,

It gives me the pleasure to welcome you all to Addis Ababa, the Headquarters of the Economic Commission for Africa.

You have come to gather here for two weeks to look into current and future problems of transport data and statistical information, and to discuss and agree on solutions to some of the major problems that you will identify.

The first regional seminar on trasnport statistics is organized by ECA jointly with Ecole National des Ponts et Chausse of Paris, France with assistance of the French Government and also with support of UNDP which kindly agreed to provide funds for travel of participants from countries which requested it.

Our immediate concern in this first seminar is to draw your attention to problems which hinder the smooth flow of data and statistical information required for the immediate and long-term development of the transport s ctor. This has to be done within the spirit and framework of self-reliant and self-sustaining economic and social development, which as you are no doubt aware, is the cornerstone of Africa's strategy for development now and in the coming decades.

You are aware also that the transport has a major role to play in the economic development of the region, and that the sector is faced with many problems amongst which are maintenance of existing infrastructure and equipment, inadequacy of skilled manpower, shortages of energy, coupled with poor planning and lack of co-ordination and harmonization of services. The net result is that the transport sector in Africa is not fulfilling its basic role of the movement of goods and persons efficiently and economically. This deficiency is difficult to rectify as it is compounded with lack of data and information on the sector's performance. The few national statistical series that are published on transport in the majority of African countries have gone only part of the way in meeting the requirements of accurate statistical data. Full inventory on mobile equipment, the networks, the stationary supporting facilities, personnel availability and requirements, passengers and goods traffic the income and expenditure and other performance indicators required for assessment of the African transport industry are available only in a

relatively small number of African countries. The reason for this is partly because some countries have neglected data collection and analysis altogether, and partly because many countries in the Region do not have the required expertise for data collection, processing, and dissemination. In cases where data are available, the failure to have up-to-date statistical information is still common because methodology and institutional framework employed for data processing are lengthy and cumbersome because decision makers do not sometimes appreciate the role of data as a tool of management. Also in cases where statistical information are published on time, the coverage are not thorough, and more often than not, the data are given only for the information of decision-makers and planners.

This seminar is, therefore, as I had said earlier, intended for the discussion of the general problems the transport sector is facing with regards to unavailability of accurate and timely statistical data and information. As you already read in my letter of invitation, our main concern is to improve the skills and knowledge of all those directly responsible for planning and policy matters in the collection, compilation, analysis and dissemination of transport data and statistics. Planning of future transport statistics seminars at modal level will depend on what you as a group consider urgently required, therefore, it is one of the tasks this seminar has to achieve.

As you all probably know, the United Nations Economic Commission for Africa and its secretariat is to assist African countries to accelerate their economic and social development. You know too that the ECA has played a major role in the formulation and adoption of the Lagos Plan of Action (LPA), and the Final Act of Lagos. Within the spirit of the LPA, the Transport and Communications Decade for African (UNTACDA) was declared in 1978 and is undergoing implementation. The implementation which has successfully reached half its period is being co-ordinated by ECA; but this cannot be achieved unless there is adequate statistical information.

The ECA is the lead agency for the implementation of UNTACDA and one of the lessons already learnt from the implementation of the first phase programme, is the inadequacy of statistical data in the transport sector, resulting in poor project identification, poor planning of maintenance requirements and capacity; and unsatisfactory identification of operating requirement and capability. These problems require deep analysis at national, subregional, and regional levels. In every country, however early its stage of development is, at least some transport does exist, and the requirement of data, therefore, remains since no decision can be made on whether the existing transport system is sufficient to satisfy future needs, or whether certain improvements are called for, without well documented data. There are transport modes in the region, known to you, which have adequate facilities, but because data on performance are inadequate, the facilities available cannot be utilized to the maximum.

I hope, therefore, that regardless of your respective areas of specialization, you will as a group first involve yourselves in considering actions to be taken in resolving the weakness which result into unavailability or inadequacies of statistical data and information in the transport sector. To help you examine in detail the specialized and technical parametres involved without loosing sight of the focus, I will now draw your attention to the work programme which has been prepared and distributed to you.

The programme calls upon you first and foremost to examine the role of statistics in the development of the transport sector, and its contributions as a tool for management and decision making in the improvement of transport services in general. From this fundamental issue you will move a step further to the general classification of transport data which will serve as an introduction to the topics on general problems of transport data collection by mode. You know that weaknesses of appropriate transport data collection is one of the root causes of transport data problems. In this seminar you have the opportunity to look at data collection problems for each mode, and I am convinced that you will make full use of this opportunity to come up with tangible recommendations on how to overcome these serious problems. The magnitude of the problem differs by mode. In air and rail transport where the data sources of statistical information (passenger tickets, way bills and consignment notes) are more elaborate, the data collection is much easier.

You have a rare opportunity during your stay here to have a look at a relatively new philosophy of data collection and processing in maritime transport. This new approach called the Uniform System which has been developed by the United Nations Statistical Office in collaboration with the United Nations Regional Economic Commissions, may be new to many of you. The Uniform System, which is basically a scheme for linking shipment of goods to the vessel in which they are transported so that shipment and vessel information can be related is a new approach for solving the problem of segmented data in maritime transport. The system will be introduced to you by Mr. Hon-Son-Chu an expert from the UN headquarters, who has for long been involved in its development and implementation in various parts of the world. You will be required to weigh the advantages of the uniform system against the conventional methods, to enable those responsible for its development, not only to finalize their recommendations for its implementation, but also to know the reaction of representatives of the African countries. to the system.

You also have an opportunity to discuss the suitability of some of the techniques and methodology available for data processing including communications facilities. Both the manual and mechanized processing methods are included in the programme and you are called upon to analyse the pros and cons of the two including their cost-benefit analysis. The role of computersin data processing is something

most of you are all familiar with. Many transport agencies in Africa especially ports, railways, and airlines use computers in one way or another, but very few of them are making full use of the expensive hardwares and softwares despite the potential of the systems they have. It is time we in Africa start using computer services for meaningful data processing, storage and retrieval. Adequate time is given to the methodology of transport data analysis in the programme because this is an area where statisticians easily go wrong especially when they defend mathematical formulae at the expense of realities.

Before I finish with the content of your work programme allow me to draw your attention to the fact that this seminar is not meant for learning quantitative techniques, since we are mainly interested in improving your performance. This does not mean that demonstration of simple mathematical techniques are ruled out. Methodology of data analysis which I have already talked of is one of those areas where quantitative methods are unavoidable. Another area where you may need demonstrations of quantitative applications is in forecasting. Forecasting is improtrant because the increased inflation of 1970s followed by the recession the region is currently experiencing, have focused renewed attention of decision makers on attempts to accurately predict the future but problems do arise in data required for forecasting and in the choice of forecasting techniques since some of the techniques available for application in transport are expensive to develop.

Your work programme ends with institutional and organizational problems of establishing and operating national, subregional, and regional statistical organizations. I am convinced that the visit arranged to the ECA statistics Division and Pan-African Documentation and Information System (PADIS) section will give you an advance insight into these important issues.

Ladies and Gentlemen,

You already have a full list of the content of your seminar, and I believe that they are of interest to all of you in your respective professional capacity as experts in transport statistics. You are expected during your discussions to identify the real data problems in transport sector, their root causes, and also recommend to the governments in the region the short and long term measures to be taken to overcome them; and I am convinced that the two weeks allocated to the seminar is adequate for this challenging task.

Finally, may I seize this opportunity to welcome our distinguished guests lecturers from Ecole National des Ponts et Chaussees in Paris, France who have been involved in this seminar right from preparatory stages and will now be with you here for the two weeks discussions. I am most grateful to them for all the help they have rendered and for their willingness to participate in the seminar, and also for accepting ECA invitation to come to Addis Ababa despite the heavy schedule of activities they have back home. I trust that you will exploit their presence here and gain from their wealth of knowledge and experience.

I now declare open the first regional seminar on transport statistics and wish you success in your discussions.

Thank you.